## Attorney Docket No. 2003 P 15030 US

## What is claimed is:

1. A commutator for an electric motor, the commutator comprising:

a body having opposing ends,

commutator bars attached to a periphery of the body, and

oil throw and recovery structure integral with the body and disposed at one of the ends of the body, the oil throw and recovery structure flaring outwardly from the one end of the body and defining a continuously curved, annular surface terminating in an annular tip,

the commutator being constructed and arranged to be mounted to a shaft with the oil throw and recovery structure being adjacent to a bearing, the oil throw and recovery structure being constructed and arranged to deflect oil, moving from the bearing and contacting the annular surface, in a direction away from the one end of the body with the annular tip directing the oil back to the bearing.

- 2. The commutator of claim 1, wherein the oil throw and recovery structure and the body are a single, molded component.
- 3. The commutator of claim 1, wherein each commutator bar includes a hook at an end thereof.
- 4. The commutator of claim 1, wherein the annular surface has a diameter less than a diameter of the commutator.
- 5. The commutator of claim 1, with the body is of an electrically insulating material.
- 6. A DC motor including:

a shaft,

a bearing associated with an end of the shaft to permit rotation of the shaft,

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a bearing retainer retaining the bearing with respect to an end of the motor,

brushes, and

a commutator coupled with the shaft for rotation therewith, the commutator comprising:

a body having opposing ends,

commutator bars attached to a periphery of the body so as to contact the brushes, and

oil throw and recovery structure integral with the body and disposed at one of the ends of the body, the oil throw and recovery structure flaring outwardly from the one end of the body and defining a continuously curved, annular surface terminating in an annular tip,

the bearing retainer defining a generally V-shaped channel generally adjacent to the annular tip, the oil throw and recovery structure being adjacent to the bearing so as to deflect oil, moving from the bearing and contacting the annular surface, in a direction away from the one end of the body, with the annular tip directing the oil to the V-shaped channel and back to the bearing.

- 7. The motor of claim 6, wherein the oil throw and recovery structure and the body are a single, molded component.
- 8. The motor of claim 6, wherein each commutator bar includes a hook at an end thereof.
- 9. The motor of claim 6, wherein the annular surface has a diameter less than a diameter of the commutator.
- 10. The motor of claim 6, with the body is of an electrically insulating material.
- 11. A DC motor including:

a shaft.

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a bearing associated with an end of the shaft to permit rotation of the shaft,

means for retaining the bearing with respect to an end of the motor, brushes, and

a commutator coupled with the shaft for rotation therewith, the commutator comprising:

a body having opposing ends,

commutator bars attached to a periphery of the body so as to contact the brushes, and

means for throwing and recovering oil integral with the body and disposed at one of the ends of the body, the means for throwing and recovering oil flaring outwardly from the one end of the body and defining a continuously curved, annular surface terminating in an annular tip,

the means for retaining defining a generally V-shaped channel generally adjacent to the annular tip, the means for throwing and recovering oil being adjacent to the bearing so as to deflect oil, moving from the bearing and contacting the annular surface, in a direction away from the one end of the body, with the annular tip directing the oil to the V-shaped channel and back to the bearing.

- 12. The motor of claim 11, wherein the oil throw and recovery structure and the body are a single, molded component.
- 13. The motor of claim 11, wherein each commutator bar includes a hook at an end thereof.
- 14. The motor of claim 11, wherein the annular surface has a diameter less than a diameter of the commutator.
- 15. The motor of claim 11, with the body is of an electrically insulating material.